

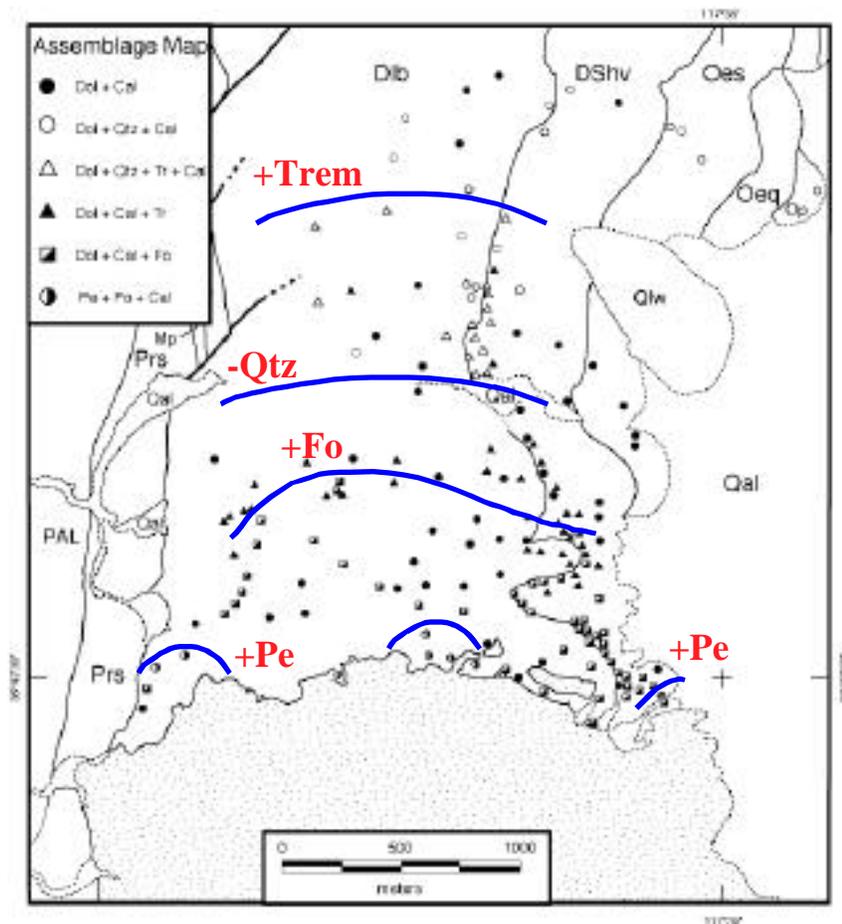
An Isograd and Mixed-Volatile Exercise using data from the Ubehebe Peak Contact Aureole

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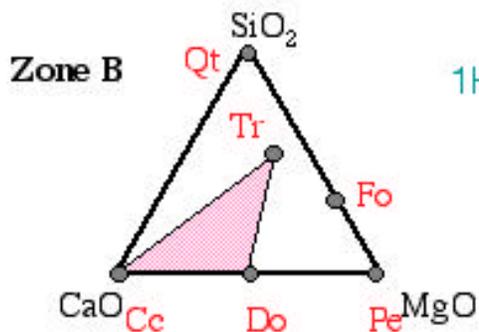
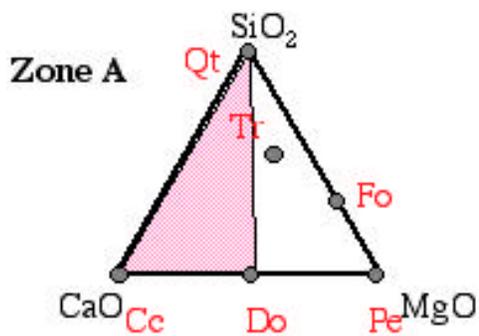
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Solution Set

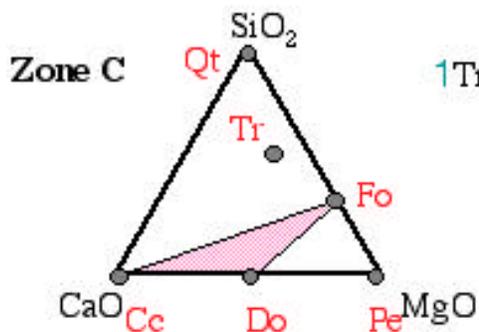
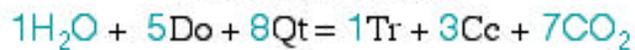


Notes:

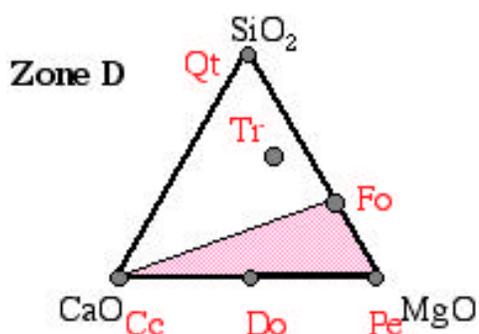
The periclase-in isograd could either be drawn parallel to the intrusion (implying uniform fluid and temperature conditions) or as three small periclase zones, as shown. The quartz-out isograd refers to the optional question #2.



Zone A -> Zone B



Zone B -> Zone C

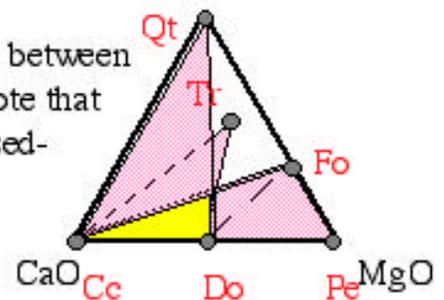


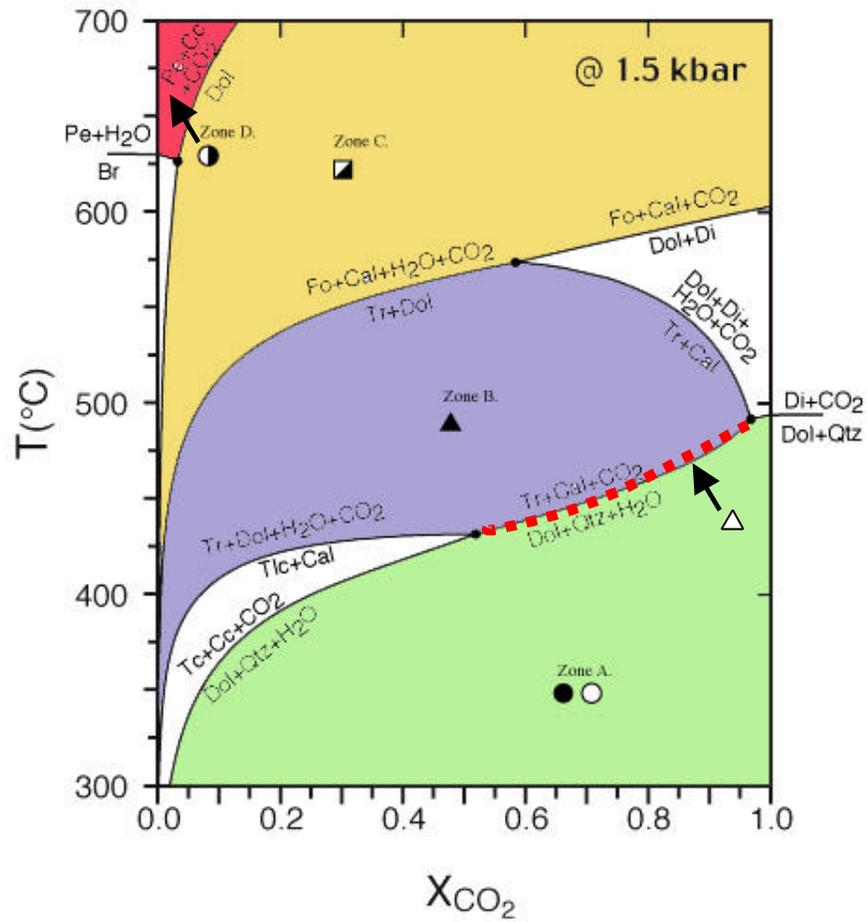
Zone C -> Zone D



Bulk Composition

Yellow marks the overlap between the four 3-phase field. Note that this analysis assumes closed-system behavior (no metasomatism).





Notes:

I use this exercise to point out that while some assemblages can be very restrictive with respect to metamorphic conditions, other assemblages give poor constraints. The Do+Qtz+Tr+Cc assemblage refers to the optional question #2.